

AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraphs beginning at page 3, lines 5-14, as follows:

A large portion of ~~to-day's~~ today's mobile user terminals have no IP control plane and ~~can~~ cannot therefore ~~not~~ make use of the CARD information in order to select a new access point or new access router or in order to shift attachment from one access network to another. Also, many of ~~to-days'~~ today's access networks are lacking an IP control plane; among these are UMTS, CDMA 2000 and GSM based networks like GPRS and EDGE. This invention relates at least in part to terminals of this kind and especially to dual stack user terminals which have an UTRAN interface and a WLAN interface. The invention also relates to access routers that support the CARD protocol and that are connected to such networks lacking IP control plane.

Another drawback with ~~to-day's~~ today's dual stack user terminals is that they have to listen through all of its interfaces towards the various access networks, in order to receive L2 beacons from the respective access networks, ~~said~~ such beacons being used for the purpose of making the user terminal aware of the existence of other access networks. Listening trough all interfaces drains the terminal's battery.

Please amend the paragraphs beginning at page 3, line 20 through page 4, line 17, as follows:

~~The~~An embodiment of the present invention has as main object to
~~remove-removes~~ or to a large extent ~~reduce-reduces~~ the drawbacks with to-
day's ~~today's~~ user terminals and ~~allow that~~allows a user terminal that has no
IP control plane ~~can to~~ retrieve candidate access router discovery information
(CARD information) that are signalled on an IP control plane between access
routers of wireless networks. The retrieved CARD information is used for
selection of the candidate access router whose functionalities best fulfill the
requirements the user terminal has.

~~Another object of the invention is to allow~~embodiment allows signalling
of translated CARD information to existing and future terminals lacking IP
control plane, and allows signalling to existing and future access networks
which are lacking IP control plane but to which access routers in accordance
with ~~the invention~~an embodiment are connected.

~~This object is achieved with the method steps indicated in claim 1.~~In an
example method, CARD protocol information on L3 is translated into L2
information messages which are transmitted to the user terminal either as
extensions to the conventional protocol used for bearer service set up between
the user terminal and an access router or as extensions to the conventional
protocol used by the individual access system for broadcasting of its system
characteristics. In the former case the translated CARD information is

transmitted on an L2 bearer service between the current access router and the user terminal and in the latter case the translated information is broadcasted by each access router on the L2 level.

An advantage achieved ~~with the invention according to claim 2~~ is that only slight modifications need to be made in the protocol information as conventionally beacons on L2 from the access routers.

An advantage achieved ~~with the invention according to claim 3~~ is that CARD information originating from access routers in candidate access networks are received by the user terminal over one and the same interface, i.e. the interface to the current access router.

An advantage ~~with the invention according to claim 7~~ is that battery drain is greatly reduced in that the user terminal listens in all its interfaces only for a short period in order to determine the access that best suits the user terminal's needs. Following this access to the best access router is established and the user terminal deactivates all its access network interfaces except the one to which access has been established.

Please amend the paragraph beginning at page 5, line 2, as follows:

In Fig. 3 the user terminal 1 is shown to reside in the coverage area of a wide area cellular network 98 and a wireless local area network 9 (WLAN), both of which are connected to an IP backbone network 10. The candidate access

router 6 connects the WLAN to the IP backbone network and current access router 2 connects the cellular network 8 to the IP backbone network.

Please amend the paragraph beginning at page 5, line 25, as follows:

To implement the above the current access router comprises a translator 16 that translates from IP based CARD information into L2 based information which is forwarded to an L2 entity 17 which in its turn transmits the information to the L2 GW. The L2 GW provides L2 functionality for signalling and bearer service set up and comprises an L2 entity 18 that receives the conventional signalling messages used by the bearer service set up protocol plus the translated CARD information and forwards it to a quality of service (QoS) manager 19 that in a conventional manner sets up the bearer service to the user terminal. In accordance with the ~~invention-embodiment~~ the QoS manager also fetches the translated CARD information from the L2 entity and forwards it to over the wide area cellular network to the user terminal provided with a QoS manager 20. QoS manager 20 further to understanding the conventional protocol messages also is provided with means 21 for understanding the protocol extensions that relate to translated CARD information.

Please amend the paragraphs beginning at page 6, lines 7-14, as follows:

~~In a specific implementation~~ As an example the wide area cellular network is UMTS. The L2 GW and current access router are co-localized in a GGSN node (Gateway GPRS Support Node). L2GW provides UMTS signalling and UMTS bearer service. The L2 entities 17, 18 may be interconnected using for example an optical fibre and an open interface schematically shown by a dash. The UMTS protocol used by QoS managers 19, 20 has extensions that relate to CARD functions, namely reverse address translation and discovery of CAR capability.

In an evolved WCDMA network the L2GW network node ~~3-13~~ and the access router 2 are ~~a~~-co-located and together form a radio network controller RNC.

Please amend the paragraphs beginning at page 6, line 29 through page 7, line 1, as follows:

Since it is required that every access router can transmit translated CARD information they and their associated access points 14 must be provided with ~~a~~-an L2 entity 24, a translator 25 and a QoS manager 26.

In order to reduce over the air signalling the translated card information is forwarded to the user terminal only when there is a candidate access router that offers capabilities that suits the needs of the user terminal better than the current access router's do. To achieve this the ~~user terminal~~ access router is

provided with means 27 for evaluating the CARD functionalities offered by candidate access routers with the CARD functionalities offered by the access router to which the terminal currently is connected and for initiating transmission of layer 2 translated CARD information only in case said evaluation reveals that there is a candidate access router with better CARD functionalities than those of the current access router, in which case said means is adapted to send the corresponding CARD information.

Please amend the paragraph beginning at page 7, line 26, as follows:

It will be noted that no IP control plane signalling is used for transferring the translated CARD information to the user terminal. The user terminal receives this information in broadcast transmissions ~~form~~from the candidate access systems while the user terminal is connected to the current access router. The user terminal ~~must~~should therefore listen in all its interfaces in order to monitor the broadcasted transmissions from candidate access systems.